



*Fairfax County*  
**VIRGINIA**



# **SECTION 1**

## **INTRODUCTION**

# INTRODUCTION

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# **SECTION 1...**

## **INTRODUCTION**

### **1.1 PLAN OVERVIEW**

**L**ike many governments that are faced with growth in demand for services and a difficult economy, the County is faced with major challenges and opportunities. These challenges and opportunities are caused by the heightened expectations of the County's constituents — citizens and the business community to interact and conduct business with the County, and, employees — to use technology to accomplish their daily tasks. This expectation occurs within an environment of rapid change and finite resources. To be successful, the County's Information Technology (IT) must operate effectively and efficiently to ensure better services, better products, shorter project life cycles, less cost and more convenience.

To ensure that Fairfax County IT can meet this challenge, continued emphasis must be put on projects that keep our technical infrastructure a strong foundation for IT applications and services, allow County government to communicate easily internally and with the community, and allow easy access to County data and services. Emphasis is also needed to ensure that IT projects are managed consistently, are cost effective, and are aligned with County's strategic goals and that there is a proper level of oversight and tracking of IT investments.

This plan summarizes the County's underlying principles for the management of IT (*Section 1*); Initiatives and Strategic Directions (*Section 2*); current IT Programs and Planned Enhancements (*Section 3*); Management Controls and Processes (*Section 4*); as well as provides a view of the Information Technology Architecture (*Section 5*). The plan identifies technology initiatives that are required to accomplish mission related objectives; project accomplishments for on-going efforts; resources required for successful implementation; and return on investment assessments for these initiatives.

The modernization efforts described in this plan are funded in the Information Technology Fund — Fund 104 and E911 — Fund 120. Sometimes projects are included in the IT Plan that are funded from other

agency resources to take advantage of total available dollars, to augment investment fund funding capacity and avail additional opportunities to meet goals for of the IT planning process. Ongoing IT operating and personnel costs are funded in the General Fund — Fund 001 and the Technology Infrastructure Fund — Fund 505. Governance, architecture, and infrastructure for supporting IT are described in this plan, but the specific routine operational work, on-going support efforts, normal upgrades and maintenance work is not reflected in this plan. Together, the four funds support the Information Technology requirements of all agencies, lines of business, and services. Additional details of each fund can be found in the Fairfax County Fiscal Year 2005 Adopted Budget Plan.

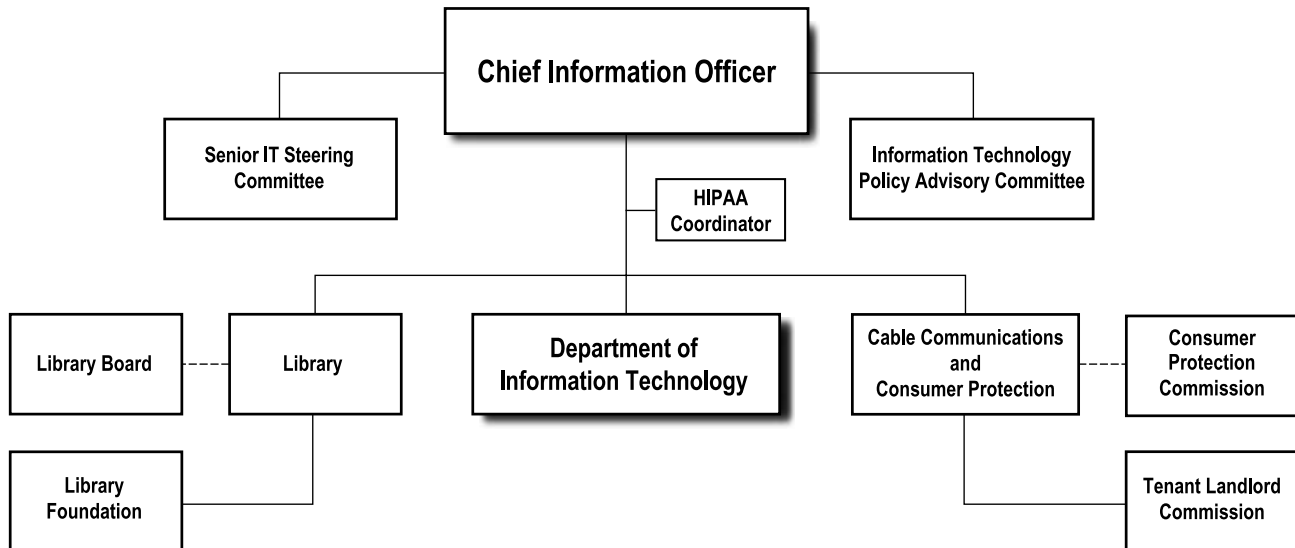
### **INFORMATION TECHNOLOGY GOALS**

In recognition of the need to link the County's Information Technology efforts more closely to its business goals, the senior management of the County met in the latter part of 1999 to define the County-wide Information Technology (IT) Goals within the context of the service demands that must be met. In addition, the formulation of the goals provided a framework by which the allocation of scarce resources could be directed and accomplishments identified and categorized.

Beginning FY 2004, based on global changes in social and economic paradigm shifts, new priorities were adopted for funding. These were re-validated for FY 2005:

- **Mandated Requirements**
- **Leveraging of Prior Investments**
- **Enhancing County Security**
- **Improving Service Quality and Efficiency**
- **Ensuring a Current and Supportable Technology Infrastructure**

## 1.2 CHIEF INFORMATION OFFICER ORGANIZATION



The County's Chief Information Officer (CIO) is responsible for the overall management of technology and information resources. The Board of Supervisors has broadened the role of the CIO since the position was created in FY1995. Not only is the CIO responsible for oversight of the Department of Information Technology, the CIO is also responsible for a broad range of information related departments. The Fairfax County Library, the Department of Cable Communications and Consumer Protection, and the Health Insurance Portability Accountability Act (HIPAA) Compliance Office also report directly to the CIO. The Office of Public Affairs information function works closely with the CIO for integrity of content for published information served through the WEB programs. The CIO's direct responsibility for information spans policy, books, television, technology, consumer protection and the management of documents.

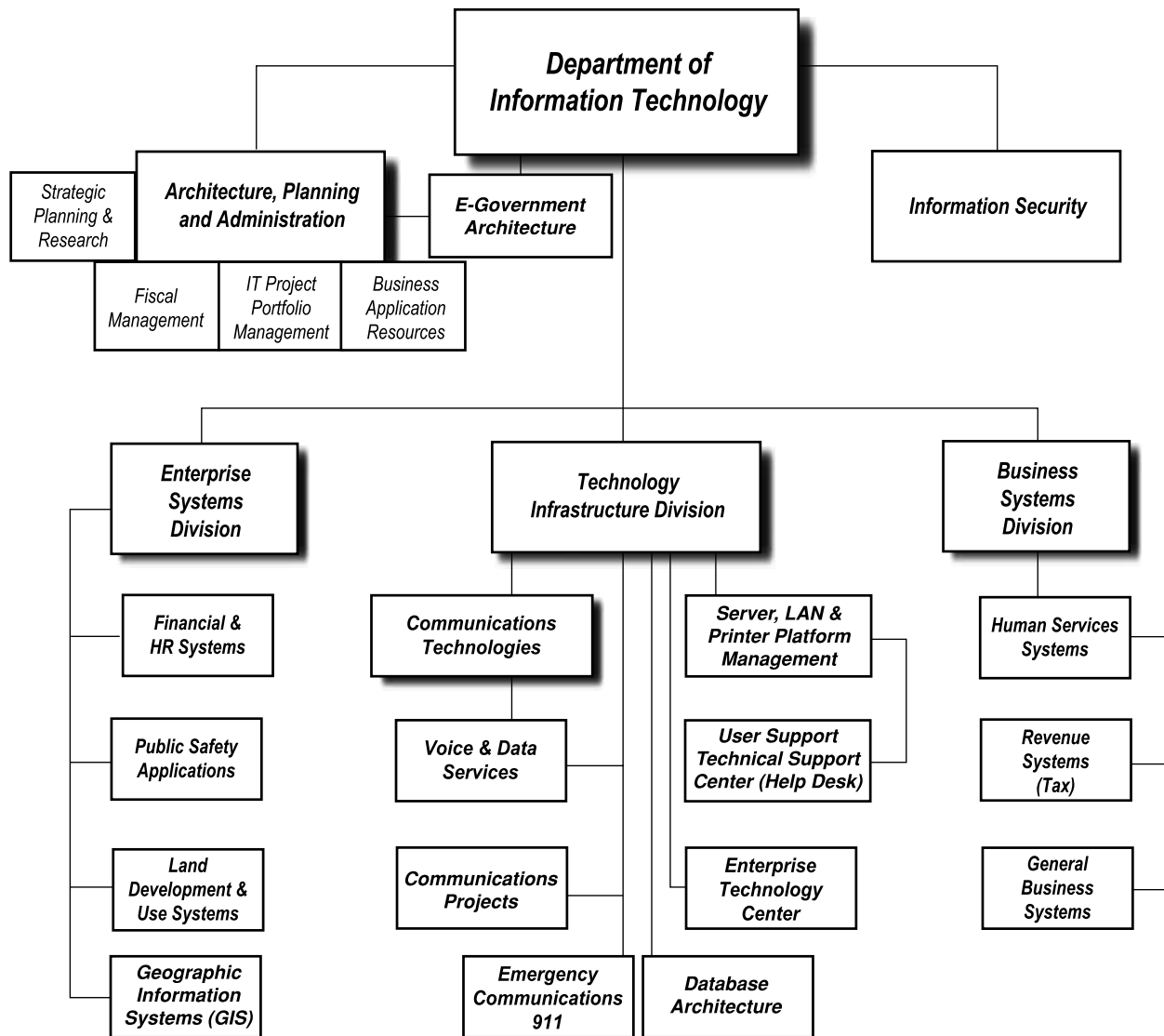
To assist the CIO with technology direction and validation of trends, the Board of Supervisors in FY1998 created a private sector group called the Information Technology Policy Advisory Committee (ITPAC). The group is made up of 10 members appointed directly by the Board of Supervisors and five members that are recommended to the Board by the Fairfax County Federation of Civic Associations, School Board, Northern Virginia Technology Council, League of Women Voters and the Fairfax County Chamber of Commerce respectively.

The ITPAC meets monthly to review the County's technology projects, plans and direction and endorses the annual technology spending plan to the Board of Supervisors during budget review and deliberations. The ITPAC serves as the board of directors to the CIO, providing advice, experience and support for the IT program.

In FY1999 an internal County group, the Senior IT Steering Committee, was created to assist and advise the CIO and CTO. Today, this group includes the County Executive, Chief Financial Officer, Deputy County Executives, Chief Information Officer, Director of the Department of Management and Budget, and Director of the Department of Information Technology/CTO. The committee's work is augmented by the Senior Management Team composed of County department heads for participation in key policy issues. The Senior IT Steering Committee meets on a regular basis quarterly to look at specific IT initiatives, opportunities and issues; set the County's IT strategy based on the Board of Supervisors' direction; and approve the annual IT investment plan which is delivered by the CIO to the ITPAC for its endorsement.

The current CIO Organization depicted below groups the County's information programs and services under a single authority to provide efficient and effective constituent services. The following paragraphs will highlight each organization with a discussion of its mission, goals and technology focus.

## Fairfax County DEPARTMENT OF INFORMATION TECHNOLOGY ORGANIZATION CHART



### 1.2.1 Department of Information Technology

The Department of Information Technology (DIT) contributes to an efficient and productive County government by providing leadership in deploying modern information technologies to improve government efficiency and citizen access to government information and services. To give focus and direction to staff within the department and to help plan for the future, an overall mission has been established together with eight goals. The mission and goals statements were developed with

considerable input from staff regarding the important issues facing the department.

Fairfax County continues to make the necessary investments in information technology hardware and software, which through careful planning, cooperative business and technical execution provides its citizens with a return on investment in the form of improved services. These goals were established to energize the

department in performing its functions of developing and maintaining current information technology systems, and providing a technology infrastructure and customer service support to County agencies. The Department of Information Technology is charged with establishing technology architecture, implementing and managing systems, applications and communications, and managing and security the county's information assets.

The current organization structure of the Department of Information Technology (DIT) as indicated in the diagram below is designed to address the ongoing evolution of technology and its utilization in support of the business functions within County Government. This evolution has seen a tremendous growth in distributed systems, from local area networks to web based and wireless hand-held computers, as well as in the number of platforms and distributed software applications used in support of various County functions. These information technology systems have become crucial components in the day-to-day operations of almost all

areas of County government, and the increasing complexity and sophistication of these systems require well-trained end users and support staff. DIT is organized into four major divisions: Enterprise Systems Division supporting applications development and support for grouped agency business areas and Geographical Information Systems; Business Systems Division which also supports specific agency business areas; Technology Infrastructure Division that manages all hardware, communications and network platforms enterprise-wide, integration tools, enterprise messaging applications as well as the network based digital multi-function printing devices that supports document management County-wide for distributed printing, print-on-demand, and electronic transfer of printed information. The Architecture, Planning and Administration Division provides support to all IT activities including standards, IT portfolio management and IT policy support, and architectural direction including web, CRM, and information architecture.

## MISSION AND GOALS

***The Department of Information Technology will deliver quality and innovative information technology solutions to provide citizens, the business community and County staff with convenient access to appropriate information and services.***

- Goal 1:** Deliver timely and effective responses to customer requirements through teamwork.
- Goal 2:** Provide vision, leadership, and a framework for evaluating emerging technologies and implementing proven information technology solutions.
- Goal 3:** Provide citizens, the business community and County staff with convenient access to appropriate information and services through technology.
- Goal 4:** Work with County agencies to improve business operations by thoroughly understanding business needs and by planning, implementing and managing the best information technology solutions available.
- Goal 5:** Guarantee a reliable communication and computer infrastructure foundation on which to efficiently conduct County business operations today and in the future.
- Goal 6:** Effectively communicate information about plans, projects, and achievements to County staff and customers.
- Goal 7:** Develop and maintain technically skilled staff that is competent in current and emerging information technology and a user community that understands and can employ modern technologies to maximize business benefits.
- Goal 8:** Ensure effective technical and fiscal management of the department's operations, resources, technology projects and contracts.

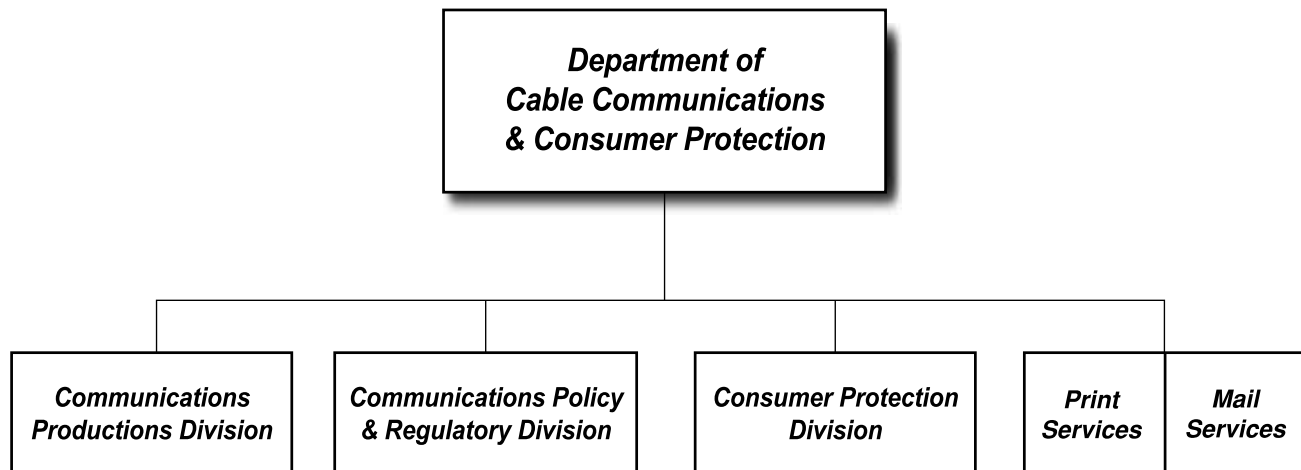


## **TEN FUNDAMENTAL PRINCIPLES OF INFORMATION TECHNOLOGY (IT)**

*In addition to the Department of Information Technology's Mission and Goals, Fairfax County Information Technology (IT) projects and processes are guided by ten fundamental principles approved by the Board of Supervisors in 1996 and updated in 2003.*

1. Our ultimate goal is to provide citizens, the business community, and County employees with timely, convenient access to appropriate information and services through the use of technology.
2. Business needs drive information technology solutions. Strategic partnerships will be established between the stakeholders and County so that the benefits of IT are leveraged to maximize the productivity of County employees and improve customer services.
3. Evaluate business processes for redesign opportunities before automating them. Use new technologies to make new business methods a reality. Exploit functional commonality across organizational boundaries.
4. Manage Information Technology as an investment.
  - Annually allocate funds sufficient to cover depreciation to replace systems and equipment before life-cycle end. Address project and infrastructure requirements through a multi-year planning and funding strategy.
  - Manage use of funds at the macro level in a manner that provides for optimal spending across the investment portfolio aligned to actualized project progress.
  - Look for cost-effective approaches to improving "legacy systems". Designate systems as "classic" and plan their modernization. This approach will help extend investments and system utility.
  - Invest in education and training to ensure the technical staffs in central IT and user agencies understand and can apply current and future technologies.
5. Implement contemporary, but proven, technologies. Fairfax County will stay abreast of emerging trends through an ongoing program of technology evaluation. New technologies often will be introduced through pilot projects where both the automation and its business benefits and costs can be evaluated prior to any full-scale adoption.
6. Hardware and software shall adhere to open (vendor-independent) standards and minimize proprietary solutions. This approach will promote flexibility, interoperability, cost effectiveness, and mitigate the risk of dependence on individual vendors.
7. Provide a solid technology infrastructure as the fundamental building block of the County's IT architecture to support reliability, performance and security of the County's information assets. Manage and maintain the enterprise network as an essential communications channel connecting people to information and process via contemporary server platforms and workstations. It will provide access for both internal and external connectivity; will be flexible, expandable, and maintainable; be fully integrated using open standards and capable of providing for the unimpeded movement of data, graphics, image, video, and voice.
8. Approach IT undertakings as a partnership of central management and agencies providing for a combination of centralized and distributed implementation. Combine the responsibility and knowledge of central management, agency staff, as well as outside contract support, within a consistent framework of County IT architecture and standards. Establish strategic cooperative arrangements with public and private enterprises to extend limited resources.
9. Consider the purchase and integration of top quality, commercial-off-the-shelf (COTS) software requiring minimal customization as the first choice to speed the delivery of new business applications. This may require redesigning some existing work processes to be compatible with beneficial common practice capabilities inherent in many off-the-shelf software packages, and, achieves business goals. In consideration of this, it is recognized that certain county agencies operate under business practices that have in established in response to specific local interpretations and constraints and that in these instances, the institutionalization of these business practices may make the acquisition of COTS software not feasible. Develop applications using modern, efficient methods and laborsaving tools in a collaborative application development environment following the architectural framework and standards. An information architecture supported by a repository for common information objects (e.g., databases, files, records, methods, application inventories); repeatable processes and infrastructures will be created, shared and reused.
10. Capture data once in order to avoid cost, duplication of effort and potential for error and share the data whenever possible. Establish and use common data and common databases to the fullest extent. A data administration function will be responsible for establishing and enforcing data policy, data sharing and access, data standardization, data quality, identification and consistent use of key corporate identifiers.

## 1.2.2 Cable Communications and Consumer Protection



The Department of Cable Communications and Consumer Protection has four major areas of responsibility that fit within the overall provisioning of information services County-wide:

**Communications Policy and Regulatory** encourages telecommunications and cable industry development throughout the County promoting the greatest diversity and highest quality service offerings at the least cost to citizens and businesses. The division develops goals for future cable and telecommunications industry development and related legislation; provides regulatory oversight and enforcement of telecommunications statutes; and obtains high quality utility services at the lowest possible rates and charges.

**Communications Productions** provides award-winning productions services for visual communication

technologies and training/informational programming for County employees that best utilize telecommunications resources.

**Consumer Protection** manages information necessary to protect consumers, investigates citizen complaints and initiates enforcement actions involving violations of consumer protection and tenant-landlord laws; provides staff support to the Consumer Protection Commission and Tenant-Landlord Commission; regulates the taxicab industry in Fairfax County; and administers a licensing program which regulates the businesses governed by chapters 6, 28, 33, 38 and 84.1 of the Fairfax County Code.

**Mail and Printing Reprographics** branches provide printing services for major publications and other specialty printing needs, and, mail distribution services for County government.

## 1.2.3 Fairfax County Public Library

### Mission

To provide and to encourage the use of library resources and services where the Fairfax County Public Library can best meet the evolving educational, recreational, and informational needs of all the residents of Fairfax County and Fairfax City, thus enhancing individual and community life.

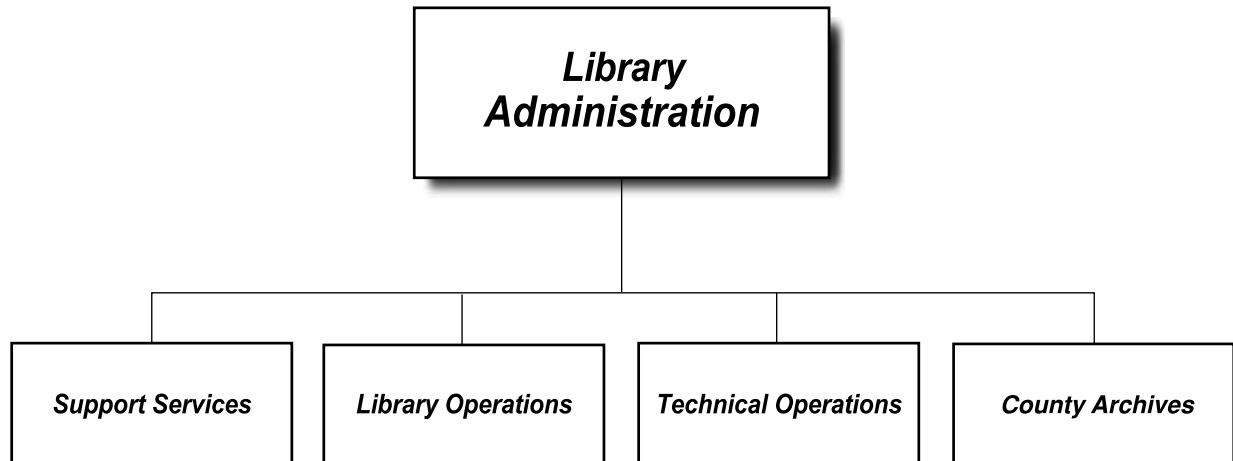
### Library Technology Vision

Fairfax County Public Library (FCPL) will assist the residents of Fairfax County and Fairfax City in accessing information by, in addition to traditional library services, providing technologies to access local and worldwide electronic information resources. Library staff will have the skills, flexibility and support to keep pace with the rapidly changing environment to use new technologies to assist users and improve delivery of services. FCPL's goal is to remain flexible and able to maximize opportunities to improve services delivery through technology.



## **Technology Goals**

- Provide County/City residents access to FCPL resources without constraints of time or location.
- Provide County/City residents access to worldwide electronic information sources.
- Expand access to local information through electronic means.
- Preserve and provide access to Fairfax County and Fairfax City historical documents and images.
- Ensure delivery of electronic library services to physically challenged residents.
- Manage FCPL resources to efficiently deliver library services to residents.



## **1.2.4 HIPAA Compliance Program**

The HIPAA Compliance Program will implement the provisions of the Health Insurance Portability and Accountability Act (HIPAA) within Fairfax County Government. HIPAA is a Federal Law enacted by Congress in 1996 to improve portability and continuity of health insurance coverage; to combat waste, fraud, and abuse in health insurance and health care delivery; to promote the use of medical savings accounts; to improve access to long term care services and coverage; and to simplify the administration of health insurance. To coordinate the County's enterprise-wide compliance with the law, the Board of Supervisors approved a HIPAA Compliance Manager position in FY2003.

Compliance with the law requires ensuring the privacy and security of "protected health information" and the transition of health claims transactions from paper-based to electronic forms. Under the law, residents and employees are provided notice of the County's privacy practices for the handling of their individually identifiable health information. Employees are provided training on appropriate policies and procedures related to the protection of health information in written, electronic, and oral mediums. Finally, technology will support HIPAA compliant business practices with the establishing HIPAA compliant security environments, implementing the EDI standards, and modification of automated information processing systems.

### **1.2.5 Information Technology Policy Advisory Committee**

The Fairfax County Information Technology Policy Advisory Committee (ITPAC) was created by the Fairfax County Board of Supervisors to provide the Board with a source of expert citizen advice regarding information technology issues.

The Board has committed itself to providing the County government with the resources it requires to keep pace with emerging trends in information technology; to providing citizens, the business community, and employees with timely and convenient access to information and services through the use of technology; and to using new technologies to create new business processes and improve government efficiency. To maintain these commitments, the Board has made substantial, continuing investments in information technology.

The ITPAC Committee membership includes:

- One representative appointed by each Board Member (10 in total);
- One representative appointed by the School Board; and
- One representative from each of the following groups:
  - Fairfax County Chamber of Commerce
  - Fairfax County Federation of Civic Associations
  - League of Women Voters
  - Northern Virginia Technology Council

The Committee duties and responsibilities are as follows:

- Keep informed regarding information technology, including telecommunications, developments and provide recommendations to the Board of Supervisors regarding technical improvements to be incorporated in the County computer and telecommunications systems.

- Review the annual Information Technology Plan and information technology budget and make recommendations to the Board of Supervisors.
- Review major information technology acquisition plans and makes recommendations to the Board of Supervisors.
- Bring facts and issues that it deems important to the attention of the Board of Supervisors.
- Undertake such other activities as become appropriate as information technology changes.

### **1.2.6 Senior Information Technology Steering Committee**

A Senior Information Technology (IT) Steering Committee, chaired by the Chief Information Officer, was formed by the County Executive to provide oversight of IT investments to ensure their alignment and support of strategic business plans. The committee monitors the entire IT project portfolio to continually assess whether the investments are providing expected benefits. This monitoring process provides a broad perspective from senior executives that independently and objectively evaluate and make decisions on the overall status, mission needs, and priorities for the County. The committee meets quarterly and reviews on-going project status in relationship to the County's strategic business initiatives. Additionally, the committee reviews and provides budget recommendations for new initiatives.

Members of the Senior IT Steering Committee include: the County Executive, Chief Information Officer (who is the Chair), two Deputy County Executives, Chief Financial Officer, the Director of the Department of Management and Budget and the Director of the Department of Information Technology/Chief Technology Officer (CTO). The committee may activate a number of sub-committees around specific issues that would report back to Senior IT Steering. The Committee presents strategic policy issues before the Senior Management Team comprised of all department heads as a part of its decision making process.